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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,946	02/08/2001	Yves Malecot	5418	6110

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Mary J Breiner
Breiner & Breiner
115 North Henry Street
PO Box 19290
Alexandria, VA 22320-0290

EXAMINER

OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 11/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,946

Applicant(s)

MALECOT ET AL.

Examiner

Marianne S. Ocampo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the at least one polarizing positioning means, must be shown, as being claimed in claim 19, or the feature should be canceled from the claim. No new matter should be entered.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the polarizing positioning means which are small salient or hollow devices fitted at the outside surface of the filter element, as described in the specification, page 9, lines 16 - 23. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13 – 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). With respect to claim 13, it is unclear how or what aspect of the inner winding turns of the absorbent tissue paper material provide for or present a “means for preventing the inner winding turns (itself) from unraveling inward”? Does the claim mean to include an additional structural element (i.e. a fastening clip or the like), or not?

b). Claims 14 – 23 and 25 are dependent claims of claim 13 and they also suffer the same defects since they depend therefrom.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13 – 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshitari (GB 2,147,821 A) in view of Whiteside (GB 2,150,456 A) and Kobayashi (US 4,487,378).

8. Regarding claim 13, Oshitari discloses a filter element (1, 5) for filtering fluid (waste water or any fluid/liquid desired to be filtered) in a filter system comprising a cylindrical case (10), the filter element (1, 5) comprising a paper material (which could be a toilet paper roll) in sheet form compactly wound to form a tubular cylinder (5) inside the cylindrical case (10) in a manner to partition an outer radial part from an inner radial part, wherein a fluid (water) is able to move across the filter element (5) in a substantially centripetal direction and the filter element is devoid of a core, as in figs. 2 and 6 and in the abstract and pages 3 – 4. It is well known in the art of fluid filtration to use different types of paper roll material, including those of absorbent toilet/tissue paper roll as filter medium in a filter system, as taught by Whiteside in the abstract and page 1, depending upon the type of filtration application and strength of filter media required. In oil filtration systems, an absorbent toilet/tissue paper roll are widely known and used, as taught by Whiteside in his abstract and page 1. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the paper roll of Oshitari by

substituting it with the toilet/tissue paper roll taught by Whiteside, in order to provide an alternative filter medium/element for the filter system which is effective in filtering fluids (particularly oil) and economical to manufacture.

8. Oshitari, as modified by Whiteside, fail to disclose the filter element being formed of an absorbent tissue paper material compactly wound to form inner winding turns which present means for preventing the inner winding turns from unraveling inward. Kobayashi teaches a coreless (absorbent) tissue (toilet) paper roll (1) in sheet form compactly wound to form a tubular cylinder to form inner winding turns (9a, 9b or 20a, 20b) therein, and the inner winding turns of the paper roll (1) having means for preventing the winding turns from unraveling inward, as in figs. 4 – 17. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the toilet paper roll of Oshitari, as modified by Whiteside, by substituting it with the coreless toilet paper roll taught by Kobayashi, in order to provide an improved filter element which does not collapse or unravel inward easily compared to other coreless paper rolls, but is also more economical/cheaper to manufacture than cored toilet paper rolls, since the costs of manufacturing the cores for the toilet paper rolls are eliminated and costs of disposing such cores are also avoided. Furthermore, since cores are eliminated in coreless toilet paper rolls, the filter element (i.e. paper roll medium) can be formed to have additional toilet paper windings which can greatly increase the filtration capacity of the filter element (see cols. 10 – 11 of Kobayashi).

9. Concerning claim 14, Kobayashi further teaches the tubular cylinder (1) formed by the coreless tissue/toilet paper roll having a mean inside diameter greater than $1/20$ of a mean outside diameter of the tubular cylinder (1), as in fig. 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the mean inside diameter of the toilet paper roll/filter element of Oshitari as modified by Whiteside, to have a value greater than $1/20$ of the mean outside diameter thereof, in order to provide a filter element which has windings which are more compacted and thus formed tighter inner winding turns, thereby providing a more stable (less likely to collapse) filter element/toilet paper roll.

10. With regards to claims 15 - 16, Kobayashi also teaches the mean inside diameter being greater than $1/4$ the mean outside diameter, being between $1/3$ and $1/2$ the mean outside diameter, in the embodiment shown in Fig. 17. It is considered obvious to one of ordinary skill in the art that the value for the mean inside diameter of the filter element/paper roll would be a result effective variable, dependent upon the degree of strength of the windings for preventing collapse or unraveling inward.

11. With respect to claim 17, Kobayashi also teaches the mean inside diameter of the cylinder could be formed such that it is greater than 25 mm, as in col. 10, lines 52 - 54. The same motivation used in claims 14 - 16 are applied here.

12. Concerning claim 18, Oshitari, as modified by Whiteside and Kobayashi, further teach the tubular cylinder/toilet paper roll having an inside wall which is cylindrical in shape and having a polygonal cross-sectional shape, as in figs. 4, 14 – 15 and 17 of Kobayashi.

13. Regarding claim 19, Oshitari also teaches a stud/switch (47) which can serve as a polarizing positioning means, capable of positioning the filter element (5) in a manner that the filter element (5) assumes a defined position within the case (10), as in fig. 6.

14. With regards to claim 20, Oshitari, as modified by Whiteside and Kobayashi, further teach the absorbent (tissue/toilet) paper material being a strip which is a continuous sheet (P) wound to provide the tubular cylinder (1), as in figs. 1 – 20.

15. Claim 21 is considered a product by process claim. The patentability of a product (i.e. the filter element formed by the absorbent paper formed into a tubular cylinder) by process claim is based upon the product itself, even though the claim is limited and defined by process (i.e. the absorbent paper being formed or comprised of series of sheets interlaced to form the tubular cylinder), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. Here, the examiner considered the absorbent paper cylinder (toilet paper roll) formed by a series of sheets interlaced rolled or wound into a tubular cylinder is an obvious variant of the absorbent

paper cylinder formed by a continuous sheet of toilet paper material taught by the prior art, Kobayashi above.

16. Regarding claims 22 – 23, Whiteside also teaches the sheet (or each sheet in the series of sheets) forming the filter element/roll of toilet paper being at least a two-ply tissue paper, as in page 1. It is considered obvious to one of ordinary skill in the art to modify the sheet of toilet paper material of the prior art (Oshitari as modified by Whiteside and Kobayashi) such that each sheet has several plies of tissue paper, in order to provide a stronger tissue paper to withstand pressure and other filtration conditions in the filtration applications.

17. Concerning claim 25, Whiteside further teaches the filter element being used in a filter system for filtering automotive engine oil, as in page 1.

Response to Amendments and Arguments

18. Applicant's arguments with respect to claims 13 – 23 and 25 have been considered but are moot in view of the new grounds of rejection presented above. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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21. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

M.S.O.
M.S.O.

November 15, 2002

W. L. Walker
W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700